ARB Architectural Coatings Survey Database Structure

The Survey

The Architectural Coatings Survey (ARCH), as developed by the ARB Stationary Source Division generally, requests information structured in the following manner:

- Responsible parties identify products which are used as architectural and industrial maintenance coatings.
- For each product or product group, the ingredients are reported. Single or grouped product ingredient information can be reported on either Form III or Form IV. Form III is used to report all ingredients in the coating(s). Form IV is used to report each volatile organic compound (VOC) and exempt compound, rather than individual ingredients used in the manufacturing of the product.

ARCH Database Structure

The ARCH database utilizes a relational design. This relational design requires that information in the database tables be structured somewhat differently than the paper forms, consequently there is not always a direct one-to-one relationship between a particular form and a database table.

The ARCH database consists of three tables for storing the information received from responsible parties and manufacturers. These three tables are:

- COMPANY This table identifies the responsible party or manufacturer. Information in this table corresponds to the Form I. For each company identified in Form I there should be a single entry in the COMPANY table. If the company is a responsible party, a manufacturer, or both, there should be a single unique entry in the COMPANY table for each specific company. The primary key to this table is a numeric Company Code (CO_ID). A responsible party's Company Code is found on the bottom of Form I, to the right of the words "FOR ARB USE ONLY".
- PROD_INFO This table identifies specific products and stores the data from Form II. Primary keys are: CO_ID, and the Entry Number (ENTRY_NO).
- INGR_INFO This table records ingredient information for each of the products reported in Form II. This table corresponds to the information entered on Form III, and Form IV. Primary keys for this table are: CO_ID, ENTRY_NO, and the Ingredient Number (INGR_NO).

The figure on the next page shows the relationship between the tables. Each box represents a database table. Where there are lines connecting the boxes, the single and double arrowheads represent one-to-many relationships between tables. For example, the line with the single arrowhead at the PROD_INFO box, and double arrowhead at the INGR_INFO box, implies that each product may have one or more ingredients.

Detailed listings and descriptions of data fields for each of these tables are contained in Attachment A - "Architectural Coatings Survey (ARCH) Data Dictionary". Refer to the Architectural Coatings Survey form for general instructions on filling in the form and what data values to use.

For those wanting to submit data electronically, please refer to Attachment B for more information.

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